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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/773,365	02/09/2004	Mutsumi Suzuki	HITA.0512	9456

7590

09/28/2006

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/773,365

Applicant(s)

SUZUKI ET AL.

Examiner

Jennifer T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,7,8,10,13,14 and 16 is/are rejected.
- 7) ☒ Claim(s) 4-6,9,11,12,15 and 17-22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2/9/04;10/25/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. Figures 3, 4, and 6 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3, 7, 8, 10, 13, 14, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Furuhashi et al. (Patent No. US 6,756,958).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C.

102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the

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inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Furuhashi teaches a display apparatus (fig. 1) having plural luminance modulation elements (118) that modulate luminance upon application of a voltage of positive polarity and do not modulate luminance upon application of a voltage of reverse polarity, having plural scanning electrodes (115) parallel with each other and plural data electrodes (114) parallel with each other, in which each of the luminance modulation elements is disposed at an intersection between the scanning electrode and the data electrode, and having

first driving means (104) connected to the plural scanning electrodes and outputting scanning pulses, and second driving means (103) connected to the plural data electrodes, wherein, at a certain time point (col. 3, lines 11-45),

the scanning electrodes are grouped into those in a selected state applied with a scanning pulse and those other than described above in a non-selected state (fig. 10),

the number of the scanning lines in the selected state (i.e., selection time-period) is $n1$, the scanning lines in the non-selected state (i.e., non-selection time-period) are grouped into non-selected state scanning lines at a high impedance state and non-selected state scanning lines at a low impedance state, the non-selected state scanning lines at the high impedance state are at a higher impedance state than the scanning lines in the selected state, and the non-selected state scanning lines at the low impedance state is in a lower impedance state than the non-selected state scanning lines at the high impedance state, and

the number of the non-selected state scanning lines at the low impedance state is $n1 \times 2$ or more (col. 11, line 54 to col. 12, line 20).

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Regarding claims 2-3, Furuhashi teaches the number of the non-selected state scanning lines at the low impedance state is 10% or less for the number of the scanning electrodes (col. 11, line 54 to col. 12, line 20).

Regarding claims 7 and 13, Furuhashi teaches a display apparatus (fig. 1) having plural luminance modulation elements (118) that modulate luminance upon application of a voltage of positive polarity and do not modulate luminance upon application of a voltage of reverse polarity, having

plural scanning electrodes (115) parallel with each other and plural data electrodes (114) parallel with each other, and having

first driving means (104) connected to the plural scanning electrodes and outputting scanning pulses, and second driving means (103) connected to the plural data electrodes (col. 3, lines 11-45), wherein

the scanning electrodes are set to at least three states (fig. 10), namely, a selected state (i.e., selection time-period) applied with a scanning pulse, a non-selected state (i.e., non-selection time-period) at a high impedance state and a non-selected state at a low impedance state,

wherein the non-selected state scanning lines at the low impedance state is at a lower impedance state than the non-selected state scanning lines at the high impedance state, and the non-selected state at the low impedance state and the non-selected state at the high impedance state are repeated alternately (col. 11, line 54 to col. 12, line 20).

Regarding claims 8 and 14, Furuhashi teaches the image display operation is conducted by a line sequential scanning operation (fig. 10, 1404-0 to 1404-2).

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Regarding claims 10 and 16, Furuhashi teaches the first driving means has a means of providing a low impedance state when the potential on the scanning electrode in the non-selected states is going to exceed a predetermined voltage range and retaining the potential on the scanning electrodes within the predetermined voltage range (col. 11, line 54 to col. 12, line 20).

4. Claims 4-6, 9, 11, 12, 15, and 17-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The prior art made of record and not relied upon is considered to pertinent applicant's disclosure: Patent No. US 6,873,309 and US 6,456,267.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer T. Nguyen whose telephone number is 571-272-7696. The examiner can normally be reached on Mon-Fri: 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Hjerpe can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Jennifer Nguyen
9/22/06

A handwritten signature in black ink, appearing to read 'R. Hjerpe', with a stylized, cursive script.

**RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600**